

In the claims:

1. (currently amended) A cleaning system for removing an amount of residual material from a liquid dispensing needle or pin, the system comprising:

a container assembly having at least one orifice;

a vacuum source operatively connected to the container assembly wherein the vacuum source ~~creates~~ draws air to create an airflow through the at least one orifice into the container assembly; and

a control system that positions the liquid dispensing needle or pin relative to the at least one orifice in the container assembly wherein the residual material is removed from the dispensing needle or pin by the airflow moving along the length of the liquid dispensing needle or pin as the airflow moves through the at least one orifice.

2. (currently amended) The cleaning system as claimed in claim 1 wherein the cleaning system is constructed and arranged such that the residual material is removed from the dispensing needle or pin without contact between the dispensing needle or pin and the container assembly.

3. (original) The cleaning system as claimed in claim 1 wherein the container assembly further includes a disposable cup for collecting an amount of removed residual material.

4. (currently amended) The cleaning system as claimed in claim 1 wherein the container assembly further includes a tube for directing the airflow towards the bottom of the disposable cup.

5. (original) The cleaning system as claimed in claim 1 wherein the container assembly includes a plurality of various diameter orifices to accommodate a variety of various gauge dispensing needles or pins.

6. (currently amended) The cleaning system as claimed in claim 5, wherein the vacuum source may be coupled with one or more of the plurality of different diameter orifices whereby an airflow is ~~created~~ drawn through the one or more of the plurality of different diameter orifices into the container assembly.

7. (original) The cleaning system as claimed in claim 5 wherein the container assembly further includes a disposable cup for collecting an amount of removed residual material.

8. (currently amended) A cleaning system for removing an amount of residual material from a liquid dispensing needle, the system comprising:

a container assembly having an iris-type shutter having a variable diameter opening;  
a vacuum source operatively connected to the iris-type shutter wherein the vacuum source ~~creates an a suction~~ draws air to create an airflow through the variable diameter opening and into the container assembly; and

a control system that positions the liquid dispensing needle or pin relative to the iris-type shutter such that the airflow through the variable diameter opening causes the removal of the residual material from the dispensing needle or pin.

9. (original) The cleaning system as claimed in claim 8 wherein the diameter of the variable diameter opening of the iris-type shutter may be increased or decreased to accommodate a variety of different gauge dispensing needles or pins.

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10. (original) The cleaning system as claimed in claim 9 wherein the control system operatively controls the diameter of the variable diameter opening of the iris-type shutter.

11. (original) The cleaning system as claimed in claim 10 wherein the container assembly further includes a disposable cup for collecting an amount of removed residual material.

12. (currently amended) A self-cleaning liquid dispensing system comprising:  
means for receiving a liquid from a liquid source;  
means for dispensing the liquid through a needle or pin onto a medium; and  
means for removing an amount of residual material from an exterior portion of the needle or pin without contacting the needle or pin by drawing air that moves in line and proximal to the exterior portion of the needle or pin.

13. (currently amended) The self-cleaning liquid dispensing system as claimed in claim 12 wherein the means for removing residual material includes a cleaning system comprising:

a container assembly having at least one orifice;

a vacuum source operatively connected to the container assembly wherein the vacuum source ~~creates~~ draws air to create an airflow through at least one orifice into the container assembly; and

means for operatively positioning the liquid dispensing needle relative to the at least one orifice wherein the residual material is removed from the dispensing needle or pin without contact between the dispensing needle or pin and the orifice.

14. (currently amended) The liquid dispensing system as claimed in claim 13 wherein the means for operatively positioning the liquid dispensing needle or pin relative to the at least one orifice includes a computer control system.

15. (currently amended) A self-cleaning liquid dispensing system comprising:  
at least one dispensing needle or pin;

A 3 a cleaning system including at least one vacuum source for operatively removing residual material from the exterior of the at least one dispensing needle or pin by creating an inline airflow proximal to the exterior of the at least one dispensing needle or pin; and

means for operatively positioning the at least one dispensing needle or pin relative to a the vacuum source.

16. (original) The self-cleaning liquid dispensing system as claimed in claim 15, wherein the cleaning system further comprises at least one container assembly.

17. (currently amended) The liquid dispensing system as claimed in claim 16, wherein the at least one container assembly further comprises at least one orifice for receiving an end of a the at least one dispensing needle or pin.

18. (original) The liquid dispensing system as claimed in claim 17, wherein the container assembly includes a plurality of various diameter orifices.

19. (original) The liquid dispensing system as claimed in claim 17, wherein the container assembly includes at least one adjustable diameter orifice.

20. (currently amended) The liquid dispensing system as claimed in claim 17, claim 18 or claim 19, wherein the at least one vacuum source is coupled with the at least one container assembly such that the vacuum source ~~causes a stream of air to flow~~ draws air through ~~an~~ the orifice and into the container assembly along the length of the at least one dispensing needle or pin.

21-22. (withdrawn)

23. (new) A cleaning system for removing an amount of material from a dispensing needle, the system comprising:

a container assembly having at least one orifice;

A3 a device to create a pressure differential between an area outside of the container assembly and an area inside the container assembly, wherein the device creates an airflow in the container assembly,

wherein the amount of material is removed from the dispensing needle by the airflow flowing inline along an outside surface of the dispensing needle.

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